

Results

Crash Reductions (Using 7 Year Before and After Periods)

Total Crashes:	73.9% Reduction	(From 46 crashes to 12 crashes)
Target Crashes*:	97.2% Reduction	(From 36 crashes to 1 crash)
Target Injury Crashes:	100.0% Reduction	(From 19 crashes to 0 crashes)
Target PDO Crashes:	94.1% Reduction	(From 17 crashes to 1 crash)
AADT:	14.4% Increase	(From 11,100 vehicles to 12,700 vehicles)

- * Target Crashes include Rear End Crashes involving:
- Vehicles making Left Turn movements from SR 2205 OR
 - Vehicles travelling southeast on SR 1243 and slowing/stopping to yield to traffic on SR 2205.

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. The center turn lane and right turn acceleration lane installations appear to have dramatically reduced the both the number and severity of Rear End Crashes.

Location Photos Taken on November 3, 2005



For the complete project evaluation report and reports on other projects, please go to:
<http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html>

North Carolina Department of Transportation
Traffic Engineering and Safety Systems Branch
Traffic Safety Systems Management Section
Safety Evaluation Group

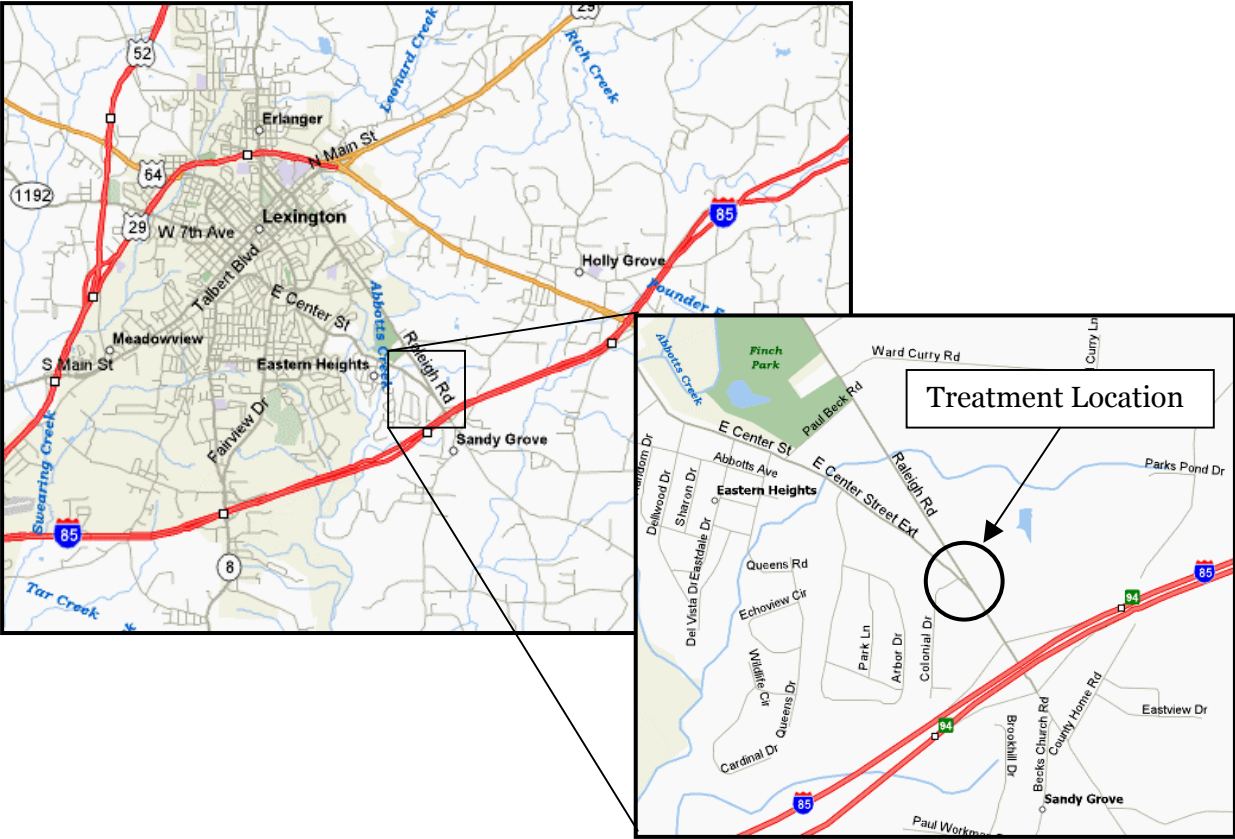
Evaluation of Hazard Elimination Project W-3613

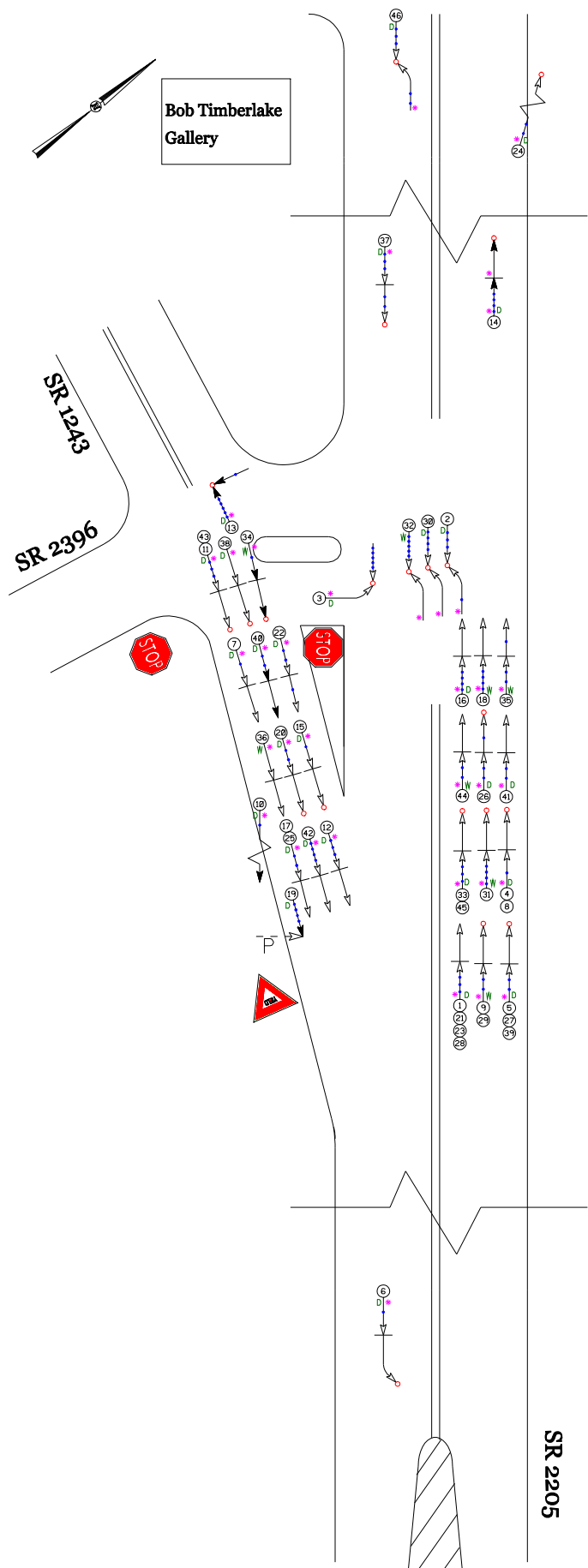
The Installation of a Center Turn Lane and Right Turn Acceleration Lane
At the Intersection of SR 2205 (Raleigh Rd) at SR 1243 (Center St)/SR 2396 (Colonial Dr)
In Davidson County

The subject intersection is located between the southbound I-85 Exit 94 on/off ramps (which is located approximately 1000 feet to the south) and the Bob Timberlake Gallery (which is located approximately 500 feet to the north). This location was originally recognized by Traffic Engineering staff as needing safety improvements because it had experienced 23 Total Crashes in the three year time period between November 1, 1992 and October 31, 1995. There was a predominant crash pattern, as 19 of the 23 crashes were Rear End Crashes

The center turn lane was designed to extend from the I-85 SB ramps north to the Bob Timberlake Gallery and was intended to alleviate Rear End Crashes caused by vehicles making left-turns from SR 2205 (Raleigh Road). The right-turn acceleration lane was designed to extend from SR 1243 (Center St) south to the I-85 SB on-ramp and was intended to alleviate Rear End Crashes caused by vehicles on SR 1243 (Center St) slowing to yield to traffic on SR 2205 (Raleigh Rd).

This project was let in May 1997 and completed on August 29, 1997 at an estimated cost of \$330,000.





Before Period Collision Diagram

May 1, 1990 through April 30, 1997
(7 Years of Crash Data)

1993 ADT = 11,100 vehicles

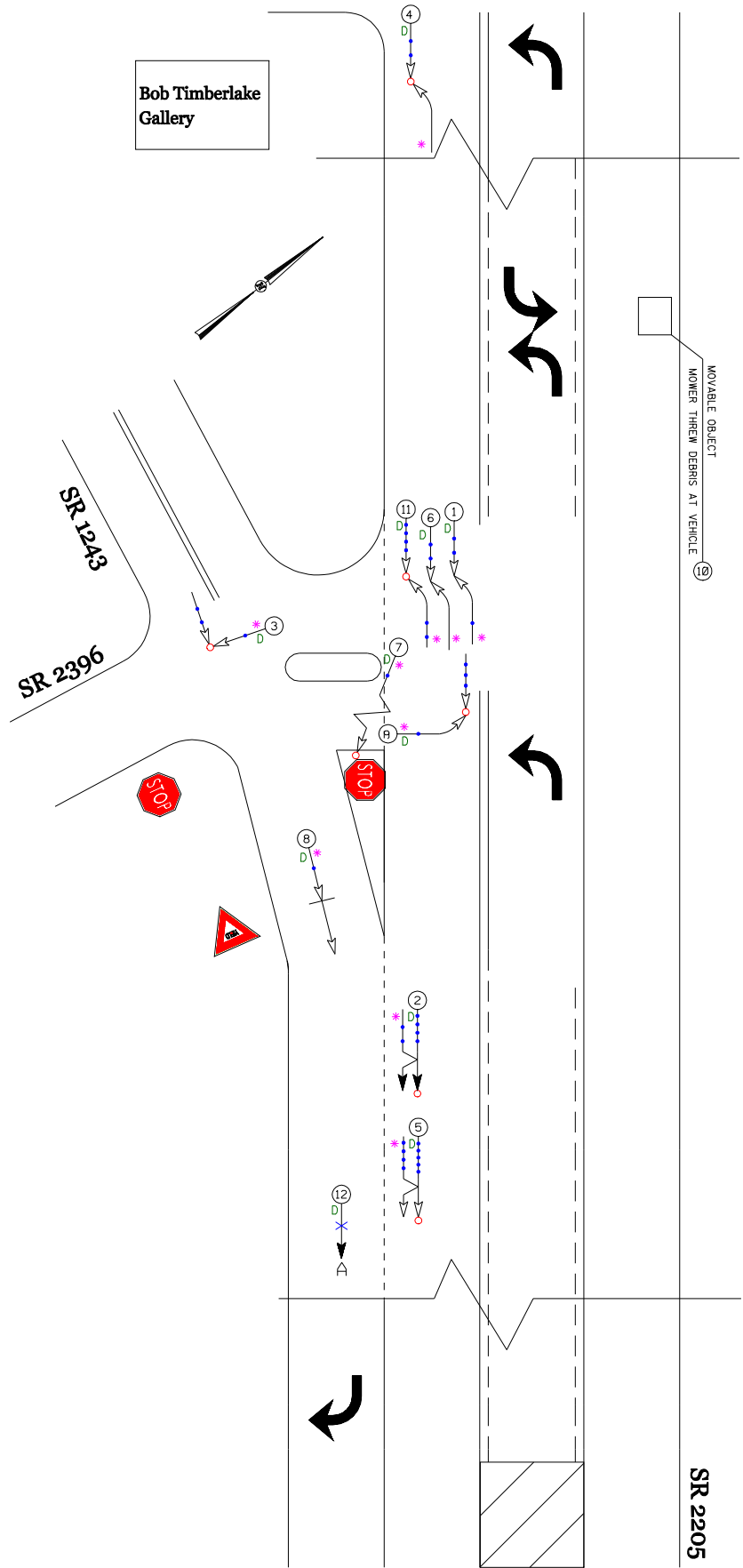
- 46 Total Crashes
- 37 Rear End Crashes
- 5 Left Turn Crashes
- 2 Ran Off Road Crashes
- 1 Angle Crash
- 1 Pedestrian Crash

- 36 Target Crashes*
- 19 Target Injury Crashes
- 17 Target PDO Crashes

* Target Crashes are crashes deemed correctable by the treatment.

For this evaluation, Target Crashes include Rear End Crashes involving:

Vehicles making Left Turn movements from SR 2205 OR
Vehicles travelling southeast on SR 1243 and slowing/stopping to yield to traffic on SR 2205.



After Period Collision Diagram

January 1, 1998 through
December 31, 2004
(7 Years of Crash Data)

2001 ADT = 12,700 vehicles

- 12 Total Crashes
- 1 Rear End Crash
- 5 Left Turn Crashes
- 1 Ran Off Road Crashes
- 1 Angle Crash
- 1 Animal Crash
- 2 Sideswipe Crashes
- 1 Non-Collision Crash

- 1 Target Crash*
- 0 Target Injury Crashes
- 1 Target PDO Crashes